Table 27. Air pollution controls on all wood products dryers.

Control device	Number of dryers	Percent of dryers
Incineration-based controls:		
RTO, RCO, TCO, or TO only	56 RTO, 7 RCO, 4 TO	10
WESP/[RTO or RCO]	4 [RCO], 32 [RTO]	5
[PM control]/WESP/RTO	3 [BH], 12 [CYC], 12 [MC]	4
[PM control]/RTO	10 [RBP], 18 [MC]	4
Process incineration (PINC)[a]	6	<1
Semi-incineration (SINC)[b]	2	<1
PINC/[PM control]	4 [BH], 3 [DESP], 6 [MC/DESP], 5 [SCBR]	3
SINC/[PM control]	9 [SCBR], 1 [WESP], 1 [MC]	2
WESP's and wet scrubbers:		
Wet scrubber only	89	13
WESP only	71	11
SCBR/WESP	4 SCBR-WESP Combo, 8 SCBR/WESP	2
MC/SCBR/WESP	2	<1
MC/WESP	7	1
Dry scrubbers and other controls:		
BH, CYC, or MC	19 BH, 12 CYC, 28 MC	9
Sand filter	2	<1
EFB	12	2
EFB + PM control	1 CYC/EFB, 5 MC/EFB, 3 MC/EFB/BH	1
RBP	1	<1
None	209	31
Total[c]	668	

[a]Process incineration is incineration via a process unit, normally a boiler or large combustion unit. Process incineration includes combustion units in which 75 percent or more of gases are combusted.

[b]Semi-incineration includes units that are controlled by partial incineration in which less than 75 percent of gases are combusted (in either a process incinerator, RTO, RCO, TCO, or TO).

[c]There are 16 additional dryers in the CBI survey responses. Two of these dryers are controlled by baghouses, two are controlled by WESP's, and 12 are uncontrolled.

Table 28a. Air pollution controls on wood products dryers segregated by product type.

Control device	Hardboard dryers		Fiberboard dryers		Veneer dryers	
	No.	%	No.	%	No.	%
Incineration-based controls:						
RTO, RCO, TCO, or TO only	1 RCO, 4 RTO	7			6 RCO, 44 RTO, 3 TO	18
PINC only	1	1			5	2
SINC only			1	13		
PINC/[PM control]					5 [SCBR]	2
SINC/[PM control]			1 [SCBR]	13	1 [MC], 8 [SCBR]	3
WESP's and wet scrubbers:						
Wet scrubber only	19	27	1	13	47	16
WESP only					34	12
SCBR/WESP					4	1
Dry scrubbers and other controls:						
Baghouse, Cyclone, or Multiclone	3 BH, 4 CYC	10				
EFB					8	3
None	38	54	5	63	112	42
Total	70		8		277[a]	

[a]There are six additional veneer dryers in the CBI survey responses. Two of these dryers are controlled by WESP's. The remaining four veneer dryers are uncontrolled.

Table 28b. Air pollution controls on wood products dryers segregated by product type.

Control device	MDF dryers		OSB dryers[b]		Particleboard dryers	
	No.	%	No.	%	No.	%
Incineration-based controls:						
RTO, RCO, TCO, or TO only	8 RTO, 1 TO	23				
WESP/[RTO or RCO]			4 [RCO], 30 [RTO]	27	2 [RTO]	1
[PM control]/WESP/RTO	3 [BH]	8	12 [CYC], 9 [MC]	18	3 [MC]	2
[PM control]/RTO			14 [MC], 10 [RBP]	18	4 [MC]	3
SINC					1	1
PINC/[PM control]	2 [BH]	5	2 [BH], 3 [DESP], 6 [MC/DESP]	9		
SINC/[PM control]	1 [WESP]	3				
WESP's and wet scrubbers:						
Wet scrubbers only	2	5			20	14
WESP	3	8	19	15	15	11
SCBR/WESP					8	6
MC/SCBR/WESP			2	2		
MC/WESP			4	3	3	2
Dry scrubbers and other controls:						
BH, CYC, or MC	7 BH	18	1 CYC, 4 MC	4	9 BH, 7 CYC, 24 MC	28
Sand filter					2	1
EFB					4	3
EFB + PM control			5 MC/EFB	4	1 CYC/EFB, 3 MC/EFB/BH	3
RBP	1	3				
None	10	26			35	25
Total	38[a]		125		141[c]	

[a]There are seven additional MDF dryers in the CBI survey responses. Two of these dryers have baghouses and five are uncontrolled.
[b]Four of the OSB dryers are conveyor dryers. Three of the conveyor dryers have PINC/DESP control and one is controlled by a cyclone.
[c]The total includes one uncontrolled agricultural fiber dryer, two molded particleboard dryers (one uncontrolled and one with SINC), four tube dryers (three with baghouses and one uncontrolled), and two "other" uncontrolled particleboard dryers. There are three additional uncontrolled particleboard dryers in the CBI survey responses.

Table 29. Air pollution controls on wood products dryers segregated by dryer type.

Control device	Rotary dryers		Tube dryers		Other dryers[a]	
	No.	%	No.	%	No.	%
Incineration-based controls:						
RTO, RCO, TCO, or TO only			8 RTO, 1 TO	12	1 RCO, 4 RTO[d]	11
WESP/[RTO or RCO]	4 [RCO], 32 [RTO]	14				
[PM control]/WESP/RTO	12 [CYC], 12 [MC]	9	3 [BH]	4		
[PM control]/RTO	18 [MC], 10 [RBP]	11				
PINC					1	2
SINC	1	1			1	2
PINC/[PM control]	2 [BH], 6 [MC/DESP]	3	2[BH]	3	3 [DESP]	7
SINC/[PM control]			1 [WESP]	1	1 [SCBR]	2
WESP's and wet scrubbers:						
Wet scrubber only	20	8	18	23	4	9
WESP only	35	13	2	3		
SCBR/WESP	8	3				
MC/SCBR/WESP	2	1				
MC/WESP	7	3				
Dry scrubbers and other controls:						
Baghouse, Cyclone, or Multiclone	6 BH, 7 CYC, 28 MC	16	13 BH, 4 CYC	22	1 CYC	2
Sand filter	2	1				
EFB	4	2				
EFB + PM control	1 CYC/EFB, 5 MC/EFB, 3 MC/EFB/BH	3				
RBP			1	1		
None	35	13	24	31	29	64
Total	260[b]		77[c]		45	

[a]Includes OSB conveyor dryers, hardboard dryers, fiberboard dryers, and unconventional particleboard dryers.
[b]There are three additional uncontrolled rotary dryers in the CBI survey responses.
[c]There are seven additional tube dryers in the CBI survey responses. Two have baghouse control and the remainder are uncontrolled.
[d]These are all hardboard dryers.

Table 30a. Air pollution controls on wood products presses.

Control device	All presses		MDF presses		OSB presses	
	No.	%	No.	%	No.	%
Incineration-based controls:						
RTO, RCO, TCO, or TO	1 RCO, 23 RTO, 1 TCO	6	5 RTO	24	1 RCO, 14 RTO, 1 TCO	41
WESP/RTO	1	<1			1	3
Semi-incineration (SINC)[a]	2	1	1	5	1	3
PINC/baghouse	1	<1	1	5		
SINC/scrubber	2	1				
WESP's and wet scrubbers:						
Wet scrubbers	9	2				
WESP	1	<1				
SCBR/BH/WESP/RTO	1	<1	1	5		
Dry scrubbers and other controls:						
BH, CYC, or MC	4 BH, 1 CYC, 1 MC	2	2 BH	10		
Biofilter	5	1			2	5
None	345	87	11	52	19	49
Total	398[b]		21[c]		39	

[a]Semi-incineration includes units that are controlled by partial incineration in which less than 75 percent of gases are combusted (in either a process incinerator, RTO, RCO, TCO, or TO).

[b]There are 33 additional presses in the CBI survey responses. One of these presses is controlled by process incineration and 32 are uncontrolled.

[c]There are seven additional MDF presses in the CBI survey responses. One of these presses is controlled by process incineration and six are uncontrolled.

Table 30b. Air pollution controls on wood products presses.

Control device	Hardboard presses		Particleboard presses		Plywood presses	
	No.	%	No.	%	No.	%
Incineration-based controls:						
RTO, RCO, TCO, or TO	1 RTO	2	3 RTO	4		
SINC/Scrubber			2	3		
WESP's and wet scrubbers:						
Wet scrubbers	8	20	1	1		
WESP			1	1		
Dry scrubbers and other controls:						
BH, CYC, MC	1 CYC, 1 MC	5	2 BH	3		
Biofilter	2	5	1	1		
None	28	68	70	88	216	100
Total	41		80[a]		216[b]	

[a]There are 18 additional uncontrolled particleboard presses in the CBI survey responses.
[b]There are eight additional uncontrolled plywood presses in the CBI survey responses.

Description of Control Device Codes

Description of control device	Code
Air filter	FILTER
Baghouse	BH
Biofilter	BIO
Cyclone	CYC
Dry electrostatic precipitator	DESP
Electrified filter bed	EFB
Multiclone	MC
Process incineration (recirculation of 75 percent or more of process exhaust through a combustion unit)	PINC
Regenerative thermal oxidizer	RTO
Regenerative catalytic oxidizer	RCO
Rotary bed protector	RBP
Sand filter	SF
Semi-incineration (recirculation of less than 75 percent of process exhaust through a combustion unit)	SINC
Thermal oxidizer	TO
Thermal catalytic oxidizer	TCO
Uncontrolled	NONE
Wet electrostatic precipitator	WESP
Wet scrubber	SCBR